WHAT IS CLAIMED IS:

1.

- A packet transmission method in a network switch, comprising: receiving a packet; determining if a destination MAC address of the packet is in a MAC table;
- determining if the destination MAC address of the packet is in a management table if the destination MAC address of the packet is not in the MAC table; and

discarding the packet if the destination MAC address of the packet is in the management table.

- 2. The packet transmission method according to claim 1, further comprising transmitting the packet to a host corresponding to the destination MAC address of the packet if the destination MAC address of the packet is in the MAC table.
- 3. The packet transmission method according to claim 1, further comprising broadcasting the packet to a network if the destination MAC address of the packet is not in the management table or the MAC table.
 - 4. A host management method in a network switch, comprising: receiving a registration request for registering a host in a MAC table; registering a MAC address of the host into the MAC table; determining if the host becomes inaccessible; and

transferring the MAC address of the host registered in the MAC table to a management table if the host becomes inaccessible.

- 5. The host management method according to claim 4, wherein the host is inaccessible if the host fails.
- 6. The host management method according to claim 4, wherein transferring the registered MAC address of an inaccessible host to the management table comprises:

 removing the registered MAC address from the MAC table; and registering the removed MAC address in the management table.
- 7. The host management method according to claim 4, further comprising transferring the MAC address registered in the management table to the MAC table if the host becomes accessible.
- 8. The host management method according to claim 7, wherein transferring the registered MAC address of an accessible host to the MAC table comprises:

 removing the registered MAC address from the management table; and registering the removed MAC address in the MAC table.
- 9. The host management method according to claim 4, further comprising monitoring a status of the host.

- 10. The host management method according to claim 9, further comprising transferring the MAC address of the host registered in the MAC table to the management table if the status of the host indicates the host is inaccessible.
- 11. The host management method according to claim 10, further comprising transferring the MAC address of the host registered in the management table to the MAC table if the status of the host indicates the host is accessible.
- 12. A packet transmission method for transmitting a packet from a network switch to a host comprising:

inputting a packet in the network switch, the packet adapted to be transmitted to a host;

discarding the packet if a MAC address of the host is registered in a management table because of inaccessibility of the host.

13. A network management method, comprising:

receiving a registration request from a remote device;

determining if the remote device is registered in a first table;

adding an address for the remote device to the first table if the remote device is not in the first table;

monitoring a status of the remote device;

receiving a packet for transmission to the remote device; and preventing transmission of the packet to the remote device if the status of the remote devices indicates the remote device is inaccessible.

- 14. The method of claim 13, further comprising adding the address for the remote device to a second table if the status indicates the remote device is inaccessible.
- 15. The method of claim 13, further comprising removing the remote device from the first table if the status indicates the remote device is inaccessible.
- 16. The method of claim 15, further comprising adding the address for the remote device to a second table if the status indicates the remote device is inaccessible.
- 17. The method of claim 16, further comprising removing the address for the remote device from the second table and adding the address for the remote device to the first table if the status of the remote device indicates the remote device is accessible.
- 18. The method of claim 16, further comprising monitoring the status of the remote device continuously.
- 19. The method of claim 16, further comprising monitoring the status of the remote device when the packet is received.

20. The method of claim 16, further comprising monitoring the status of the remote device when a registration request is received.